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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,120	04/07/2006	Ryoji Nomura	0553-0492	9220
26568 7590 08/20/2009				
COOK ALEX LTD SUITE 2850 200 WEST ADAMS STREET CHICAGO, IL 60606				
EXAMINER				
CROUSE, BRETT ALAN				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
08/20/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,120

**Applicant(s)**

NOMURA ET AL.

**Examiner**

Brett A. Crouse

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-14 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

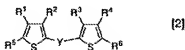
1. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

#### Species I:

A light emitting element comprising:

a pair of electrodes including a first electrode and a second electrode;  
a light emitting layer between the pair of electrodes; and  
a layer between the light emitting layer and at least one of the pair of electrodes,  
wherein the layer contains a composite of a conjugated molecule represented by  
a following general formula [2] and a substance having an electron-accepting property to  
the conjugated molecule,



wherein the Y represents an arylene group.

Applicant is required to elect independently for each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> one of a hydrogen atom, an aryl group, an alkyl group, a cyano group, a dialkylamino group, a thioalkoxy group, and an alkoxy group.

**Applicant is also required to provide an ultimate species.**

**Species II:**

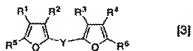
A light emitting element comprising:

a pair of electrodes including a first electrode and a second electrode;

a light emitting layer between the pair of electrodes; and

a layer between the light emitting layer and at least one of the pair of electrodes,

wherein the layer contains a composite of a conjugated molecule represented by a following general formula [3] and a substance having an electron-accepting property to the conjugated molecule,



wherein the Y represents an arylene group.

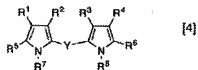
Applicant is required to elect independently for each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> one of a hydrogen atom, an aryl group, an alkyl group, a cyano group, a dialkylamino group, a thioalkoxy group, and an alkoxy group.

**Applicant is also required to provide an ultimate species.**

**Species III:**

A light emitting element comprising:

a pair of electrodes including a first electrode and a second electrode;  
a light emitting layer between the pair of electrodes; and  
a layer between the light emitting layer and at least one of the pair of electrodes,  
wherein the layer contains a composite of a conjugated molecule represented by  
a following general formula [4] and a substance having an electron-accepting property to  
the conjugated molecule,



wherein the Y represents an arylene group.

Applicant is required to elect independently for each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> one  
of a hydrogen atom, an aryl group, an alkyl group, a cyano group, a dialkylamino group,  
a thioalkoxy group, and an alkoxy group.

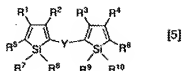
Applicant is required to elect independently for each of R<sub>7</sub> and R<sub>8</sub> one of a  
hydrogen atom, alkyl group and an aryl group.

**Applicant is also required to provide an ultimate species.**

**Species IV:**

A light emitting element comprising:

a pair of electrodes including a first electrode and a second electrode;  
a light emitting layer between the pair of electrodes; and  
a layer between the light emitting layer and at least one of the pair of electrodes,  
wherein the layer contains a composite of a conjugated molecule represented by  
a following general formula [5] and a substance having an electron-accepting property to  
the conjugated molecule,



wherein the Y represents an arylene group.

Applicant is required to elect independently for each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> one of a hydrogen atom, an aryl group, an alkyl group, a cyano group, a dialkylamino group, a thioalkoxy group, and an alkoxy group.

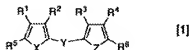
Applicant is required to elect independently for each of R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> one of a hydrogen atom, alkyl group and an aryl group.

**Applicant is also required to provide an ultimate species.**

**Species V:**

A light emitting element comprising:

a pair of electrodes including a first electrode and a second electrode;  
a light emitting layer between the pair of electrodes; and  
a layer between the light emitting layer and at least one of the pair of electrodes,  
wherein the layer contains a composite of a conjugated molecule represented by  
a following general formula [1] and a substance having an electron-accepting property to  
the conjugated molecule,



wherein the Y represents an arylene group.

Applicant is required to elect independently for each of X and Z one of a sulfur atom, an oxygen atom, a nitrogen atom, or a silicon atom, such that X and Z are not the same.

Applicant is required to elect independently for each of R<sub>1</sub>, R<sub>2</sub>, R<sub>3</sub>, R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> one of a hydrogen atom, an aryl group, an alkyl group, a cyano group, a dialkylamino group, a thioalkoxy group, and an alkoxy group.

Applicant is required to elect independently for each of R<sub>7</sub>, R<sub>8</sub>, R<sub>9</sub>, R<sub>10</sub> if present, with reference to formulae (4) and (5) above, one of a hydrogen atom, alkyl group and an aryl group.

**Applicant is also required to provide an ultimate species.**

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

2. The claims are deemed to correspond to the species listed above in the following manner:

Species I: Claims 1, 2, 6-14.

Species II: Claims 1, 3, 6-14.

Species III: Claims 1, 4, 6-14.

Species IV: Claims 1, 5, 6-14.

Species V: Claims 1, 6-14.

The following claim(s) are generic: Claim 1.

3. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:



Claim 1 is not novel over the prior art. Attention is directed to EP 1,439,590 which teaches an electroluminescent device, [0120], comprising mono-, oligo- or poly-mers of formula (I), [0026] [0029]. The compound(s) of formula (I) can be used in charge transport compositions, [0028], alone or in combination [0027]. The composition(s) comprising compound(s) of formula (I) can further comprise additional dopants including electron acceptor materials, [0079].

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is (571)-272-6494. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on 571-272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. A. C./  
Examiner, Art Unit 1794

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit  
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